

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: SHINGLE POND	Lake Area (ha):	1.25
Town: CHATHAM	Maximum depth (m):	2.1
County: Carroll	Mean depth (m):	1.0
River Basin: Saco	Volume (m <sup>3</sup> ):	12000
Latitude: 44°05'52" N	Relative depth:	1.7
Longitude: 71°04'31" W	Shore configuration:	1.00
Elevation (ft): 1710	Areal water load (m/yr):	5.52
Shore length (m): 350	Flushing rate (yr <sup>-1</sup> ):	5.70
Watershed area (ha): 10.6	P retention coeff.:	0.64
% watershed ponded: 0.0	Lake type:	

BIOLOGICAL:

6 March 1996

10 July 1995

DOM. PHYTOPLANKTON (% TOTAL)	#1	DINOBRYON 60%	CHRYOSOPHAERELLA 60%
	#2	(ALL ALGAE SPARSE)	GLENODINIUM 35%
	#3		
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			18.99
DOM. ZOOPLANKTON (% TOTAL)	#1	NO ZOOPLANKTON	KERATELLA 24%
	#2	OBSERVED	TRICHOCERCA 16%
	#3		NAUPLIUS LARVA 16%
ROTIFERS/LITER		<1	132
MICROCRUSTACEA/LITER		<1	104
ZOOPLANKTON ABUNDANCE (#/L)		<1	236
VASCULAR PLANT ABUNDANCE			Common/Abun
SECCHI DISK TRANSPARENCY (m)			2.1 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		6.5	4.2
BACTERIA (E. coli, #/100 ml)	#1		
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>) : None  
Anoxic volume (m<sup>3</sup>) : None

**CHEMICAL:**

Lake: SHINGLE POND

Town: CHATHAM

	6 March 1996		10 July 1995		
DEPTH (m)	1.5		1.0		
pH (units)	5.4		5.6		
A.N.C. (Alkalinity)	1.1		1.4		
NITRATE NITROGEN	< 0.05		< 0.10		
TOTAL KJELDAHL NITROGEN	0.21		0.71		
TOTAL PHOSPHORUS	0.017		0.026		
CONDUCTIVITY ( $\mu$ mhos/cm)	21.6		14.9		
APPARENT COLOR (cpu)	30		55		
MAGNESIUM			0.15		
CALCIUM			1.0		
SODIUM			< 1.0		
POTASSIUM			< 0.40		
CHLORIDE	< 2		< 2		
SULFATE			2		
TN : TP	12		27		
CALCITE SATURATION INDEX			5.6		

All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 1995**

D.O. S.D. PLANT CHL TOTAL CLASS

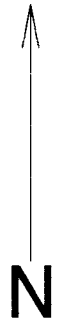
**	2	4	4	10	Eutro.
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**COMMENTS:**

1. This is a small shallow remote pond located within the White Mountain National Forest. It was surveyed jointly with the Fish and Game Department. Access is via a 3 mile trail.
2. This is a tea-colored, acidic, eutrophic pond surrounded by bog plants and drowned trees. It is a productive pond with abundant phytoplankton, zooplankton and macrophyte growth.. Aquatic insects and birds are also plentiful.

# Shingle Pond

## Chatham



N

5 foot depth contour

0

0.1

km

\*

7'

5

launch

[illegible]

TOWN: CHATHAM  
WEATHER: PARTLY CLOUDY

[illegible]

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SECCHI DISK (m):    2.1 VOB      COMMENTS:
BOTTOM DEPTH (m):   2.1
TIME: 1130
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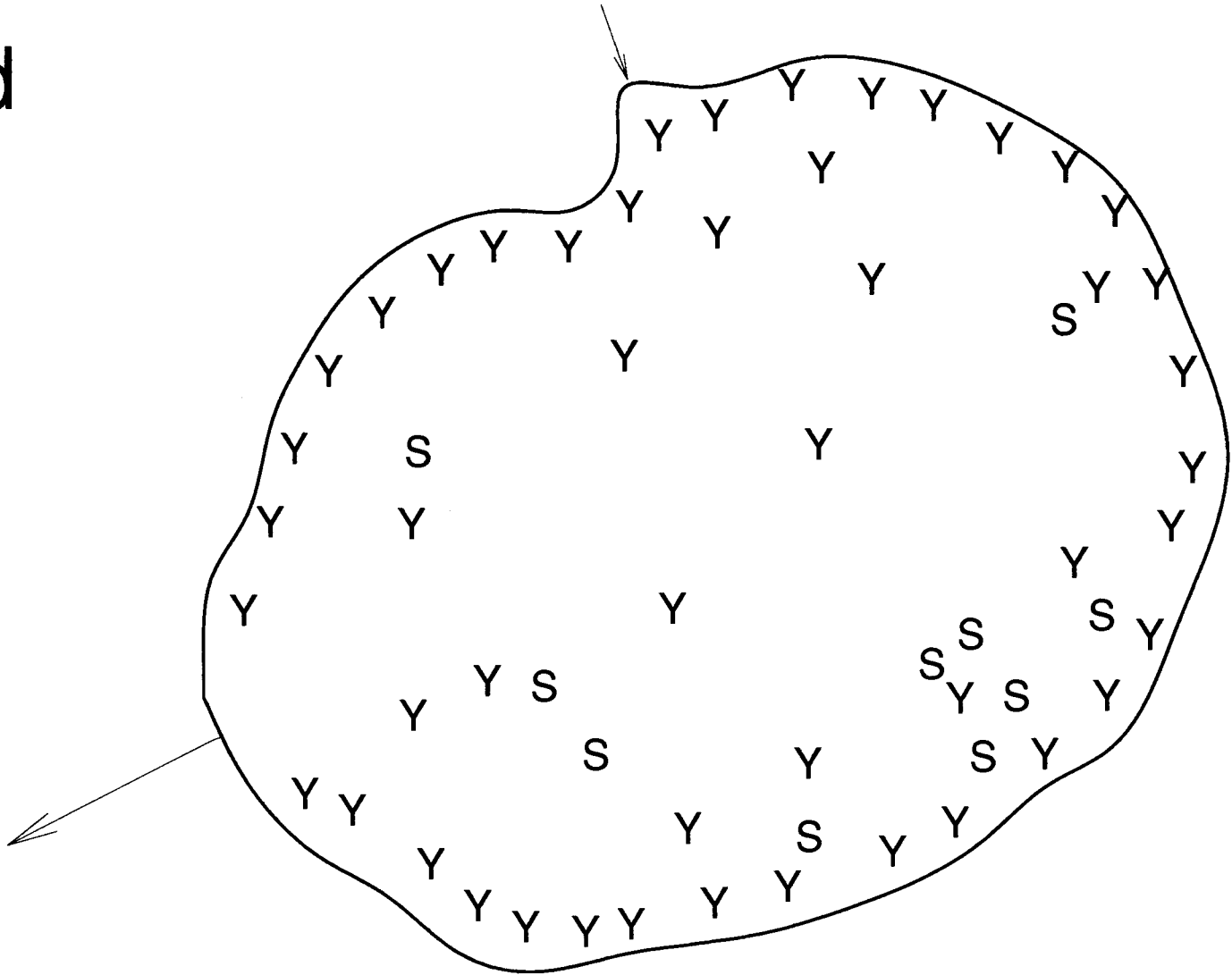
\*Dissolved oxygen values are in mg/L

# Shingle Pond

Chatham



111 - 240



0

0.1

km

[illegible]